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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,392	07/26/2001	Alex James Hinchliffe	01.054.01	5032
7590 03/27/2007 Zilka-Kotab, PC P.O. Box 721120			EXAMINER	
			HENNING, MATTHEW T	
San Jose, CA 95172-1120			ART UNIT	PAPER NUMBER
		•	2131	
	141			· · · · · · · · · · · · · · · · · · ·
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/27/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	09/912,392	HINCHLIFFE ET AL.			
Office Action Summary	Examiner	Art Unit			
,	Matthew T. Henning	2131			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNICA R 1.136(a). In no event, however, may a repl riod will apply and will expire SIX (6) MONTH atute, cause the application to become ABAN	TION. y be timely filed S from the mailing date of this communication. DONED (35 U.S.C. § 133).			
Status		•			
1) ☐ Responsive to communication(s) filed on 1/2 a) ☐ This action is FINAL . 2b) ☐ 3) ☐ Since this application is in condition for allo	This action is non-final.	s prosecution as to the merits is			
closed in accordance with the practice und	•	•			
Disposition of Claims					
Disposition of Claims 4) ☐ Claim(s) 7-27,34-54 and 61-81 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 7-27,34-54 and 61-81 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examiner. 10)☒ The drawing(s) filed on 30 October 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Sun	nmary (PTO-413)			
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/N	Mail Date rmal Patent Application			
U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Offic	e Action Summary	Part of Paper No./Mail Date 20070321			

This action is in response to the communication filed on 1/17/2007.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/17/2007 has been entered.

Response to Arguments

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Regarding applicants' argument that Hruska did not disclose a database of computer files, the examiner does not find the argument persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the combination of Hruska and Le Pennec replaces the checksum database with the database of virus-free certificates which falls within the scope of "computer file". As such the examiner does not find the argument persuasive.

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Regarding the applicants' argument that the "number of hits" of Le Pennec does not fall within the scope of a "persistence flag", the examiner does not find the argument persuasive.

The claim requires that the "persistence flag" indicate whether an entry in the database should be

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purged from said database during purge operations. The "number of hits" is used to determine
which entries will be removed from the database during purging (when the database is full and a
new entry is to be added). As such, the claim limitation is met, and the examiner does not find
the argument persuasive.

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In response to applicant's argument that the references fail to disclose wherein said database...from said computer file, the examiner does not find the argument persuasive. The examiner points out that Le Pennec does in fact teach the database having fields for "a filename of said computer file" as seen in Fig. 3 Element 305, "data identifying said requesting computer and a storage location of said computer file" as seen in Fig. 3 Element 304 and Col. 10 Lines 27-32, and "a checksum value calculated from said computer file" as seen in Fig. 5 Element 507.

As such, the examiner does not find the argument persuasive.

Claims 7-27, 34-54, and 61-81 have been examined.

All objections and rejections not presented below have been withdrawn.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed towards a "computer program product". As a computer program listing falls within the scope of a computer program product, and a computer program listing is a computer program *per se*, a computer program product would include a computer program *per se*. A computer program *per se* is classified as Non-functional

6,892,303) hereinafter referred to as Le Pennec.

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1 Descriptive Language, and as such is not statutory. Therefore, the claims are rejected for failing

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to meet the statutory requirements of 35 USC 101. See MPEP § 2106.IV.B.1(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-13, 16-24, 27, 34-40, 43-51, 54, 61-67, 70-78, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hruska et al. (US Patent Number 6,195,587) hereinafter referred to as Hruska, and further in view of Le Pennec et al. (US Patent Number

Regarding claims 7, and 17, Hruska disclosed a computer program product for controlling a computer to detect malware, said computer program product comprising (See Hruska Abstract and Col. 3 Lines 40-54 where it was implied that a computer program product was implemented in this system because the system relies on processors, which rely on computer programs): file access request detecting logic operable to detect a file access request to a computer file by a requesting computer (See Hruska Col. 3 lines 63-65); file access clearance request generating logic operable to generate a file access clearance request including data

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1 identifying said computer file (See Hruska Col. 3 Lines 20-24 and Col. 4 Lines 20-23); file 2 access clearance request transmitting logic operable to transmit said file access clearance request 3 from said requesting computer to an assessment computer responsible for assessment of whether 4 said computer file contains malware (See Hruska Col. 3 Lines 20-24 and Col. 4 Lines 20-23); 5 file access clearance request receiving logic operable to receive at said assessment computer said 6 file access clearance request from a requesting computer (See Hruska Col. 5 Lines 60-66); file 7 access clearance response generating logic operable in dependence upon said data identifying said computer file to determine if said computer file has previously been assessed as not 9 containing malware and to generate a file access clearance response (See Hruska Col. 5 Lines 3-10 10); file access clearance response transmitting logic operable to transmit said file access 11 clearance response to said requesting computer (See Hruska Col. 5 Lines 66-67); file access 12 clearance response receiving logic operable to receive at said requesting computer said file 13 access clearance response from said assessment computer (See Hruska Col. 4 Lines 45-52 and 14 Col. 5 Lines 66-67 wherein it was implied that the requesting workstation received the report because the file server sent the report to the workstation and the workstation used the report); and 15 16 file access permitting logic operable if said file access clearance response indicates said 17 computer file does not contain malware to permit said file access request by said requesting 18 computer (See Hruska Col. 4 Lines 45-52), and wherein said assessment computer stares a database of computer files including for each file a checksum of the file when last determined to 19 20 be valid (See Hruska Col. 5 Lines 14-18 and 22-25), but Hruska failed to disclose wherein said 21 database includes for each computer file a persistence flag indicating whether an entry relating to 22 said computer file should be purged from said database during purge operations, or wherein said

database includes for each computer file fields specifying a filename of said computer file, and data identifying said requesting computer and a storage location of said computer file.

Le Pennec teaches that in a virus detection system, in order to improve virus detection, a virus-free certificate should be associated with a file and stored in a database (See Le Pennec Col. 5 Lines 29-34 and Fig. 5 and associated text) as well as teaching that each certificate should have a hit count (511) which is used to determine if the certificate will be removed from the database upon adding a new certificate to a "full" database (See Le Pennec Fig. 7 and associated text), and a filename of said computer file (See Le Pennec Fig. 5 Element 504), and data identifying said requesting computer and a storage location of said computer file (See Le Pennec Fig. 3 Element 304).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Le Pennec in the virus detection system of Hruska by utilizing the virus-free certificates in place of the checksums of Hruska. This would have been obvious because the ordinary person skilled in the art would have been motivated to improve upon the virus detection of Hruska.

Regarding claims 8, and 18, Hruska and Le Pennec disclosed that said data identifying said computer file includes a checksum value calculated from said computer file (See Hruska Col. 3 Lines 1-3 and Col. 4 Lines 13-16 and Le Pennec Fig. 5).

Regarding claims 9, and 19, Hruska and Le Pennec disclosed that said data identifying said computer file includes one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file (See Hruska Col. 5 Lines 43-48, and 51-56 and Le Pennec Fig. 5).

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Regarding claims 10, and 20, Hruska and Le Pennec disclosed that if said file access
clearance response indicates a scan of said computer file is required by said assessment
computer, then computer file transmitting logic is operable to transmit said computer file from
said requesting computer to said assessment computer, receiving at said assessment computer
said computer file from said requesting computer and performing a malware scan of said
computer file (See Hruska Col. 4 Lines 20-23 and 26-40 and Col. 5 lines 10-13).
Regarding claims 11 and 21, Hruska and Le Pennec disclosed that if said file access
clearance response indicates access to said computer file is denied, then triggering a denied
access response in said assessment computer (See Hruska Col. 5 Lines 18-22).
Regarding claim 22, Hruska and Le Pennec disclosed that if said file access clearance
response indicates access to said computer file is denied, then triggering a denied access
response in said requesting computer (See Hruska Col. 4 Lines 52-55).
Regarding claims 12 and 23, Hruska and Le Pennec disclosed that said assessment
computer stores a database of computer files previously assessed as to whether they contain
malware (See Hruska Col. 5 Lines 14-18).
Regarding claims 13 and 24, Hruska and Le Pennec disclosed that said database further
includes for each computer file another field specifying an access flag indicating whether access
to said computer file is denied (See Hruska Col. 5 Lines 14-18 and 22-25).
Regarding claims 16, and 27, Hruska and Le Pennec disclosed that a plurality of
requesting computers share access to an assessment computer for determining whether file
access requests by those requesting computers should be denied (See Col. 5 Lines 26-40).

Claims 34-40, 43-51, and 54 are rejected for the same reasons as claims 7-13, 16-24, and 27 respectively, and further because Hruska disclosed the method of the above rejected claims (See Hruska Abstract).

Claims 61-67, 70-78, and 81 are rejected for the same reasons as claims 7-13, 16-24, and 27 respectively, and further because Hruska disclosed the system of the above rejected claims (See Hruska Abstract).

Claims 14-15, 25-26, 41-42, 52-53, 68-69, and 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hruska and Le Pennec as applied to claims 7, 17, 34, 44, 61, and 71 above respectively, and further in view of Caccavale (US Patent Application Publication Number 2002/0129277).

Hruska and Le Pennec disclosed denying access to files in the event that they contain characteristic forms of viruses (See Col. 1 Lines 62-65 and Col. 4 Lines 45-55), but failed to disclose a message being sent to the file server indicating a switch to a mode of operation wherein more files are denied for access. Hruska does, however, disclose that a user can indicate that all files need to be checked by the file server regardless of prior results (See Hruska Col. 4 Lines 55-57).

Caccavale teaches that it is often the case that a virus checker program is unable to detect a new virus (See Caccavale Paragraph 0075 Lines 1-2). Caccavale further teaches that in such a case, an updated anti-virus pattern file should be distributed to the virus checker program, at which point all the files can be marked as unchecked in order for all the files to be checked for the new virus using the new pattern (See Hruska Paragraph 0075).

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It would have been obvious to the ordinary person skilled in the art at the time of
invention to employ the teachings of Caccavale in the file checking system of Hruska and Le
Pennec by sending new anti-virus patterns to the file server, and in response to receiving the new
pattern, marking all the files as unchecked and needing to be scanned. This would have been
obvious because the ordinary person skilled in the art would have been motivated to protect the
workstations from files containing new viruses that the file server did not know of when the file
was originally scanned. In this manner, the fileserver would rescan all the files with a greater
likelihood of finding a virus and therefore denying access to more files.
Conclusion

Claims 7-27, 34-54, and 61-81 have been rejected.

1	Any inquiry concerning this communication or earlier communications from the
2	examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790.
3	The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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20 Matthew Henning

- 21 Assistant Examiner
- 22 Art Unit 2131
- 23 3/21/2007

AYAZ SHEKH

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100